

SPERM PROTEIN 17 FOR THE DIAGNOSIS AND
TREATMENT OF CANCER

ABSTRACT OF THE DISCLOSURE

5 The results herein identify Sp17 as a novel cancer-
testis antigen in multiple myeloma. Sp17 recombinant
protein was generated from E. coli. A CD8 predominant CTL
line was generated that was able to lyse autologous
targets in a Sp17-dependent HLA class I-restricted manner,
10 using dendritic cells as the antigen-presenting cells and
DOTAP to deliver the Sp17 protein to the dendritic cells.
A combination of HLA-matched and mismatched antibody-
enriched fresh myeloma tumor cells and myeloma cell lines
were used as targets for the recombinant protein-
15 propagated CTL. The findings of target cell lysis suggest
that the Sp17 protein produced by Sp17⁺ tumor cells are
processed and presented in vivo and that the CTL epitopes
are presented in association with HLA class I molecules in
a concentration and configuration recognized by
20 recombinant protein-propagated CTL.